AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Canceled).

Claim 2. (Currently Amended) Method as claimed in Claim ~~30~~ 32, wherein the thermally loaded components include the walls of the combustor and/or walls of the transition pieces and/or housing parts of the turbine and/or rotor parts of the turbine and/or blades of the turbine.

Claim 3. (Currently Amended) Method as claimed in Claim 2, wherein the blades of the turbine are cooled with the cooling air, and ~~the~~ drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 4. (Canceled).

Claim 5. (Currently Amended) Method as claimed in Claim ~~30~~ 32, wherein the compressor of the gas turbine system itself is used for compressing the cooling air after the cooling process.

Claims 6-9. (Canceled)

Claim 10. (Currently Amended) Method as claimed in Claim ~~30~~ 32, wherein a cooler is used to cool the cooling air.

Claims 11-14. (Canceled).

Claim 15. (Currently Amended) ~~Apparatus for cooling a gas turbine system as claimed in~~ The method of Claim 33, wherein the ~~cooled~~ components to be cooled include blades of the turbine, and the drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 16. (Currently Amended) ~~Apparatus for cooling a gas turbine system as claimed in~~ The method of Claim 33, wherein the second cooling lines merge into the compressor at an intermediate pressure level.

Claims 17-22. (Canceled).

Claim 23. (Currently Amended) ~~Apparatus for cooling~~ The method of claim 33, wherein the ~~a~~ gas turbine system ~~as claimed in claim 33, wherein~~ comprises a cooler ~~is~~ located in the first cooling lines.

Claims 24-31. (Canceled).

Claim 32. (Previously Presented) A method for cooling a gas turbine system comprising a compressor that takes in suction air on the inlet side and compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, the method comprising:

removing compressed air from the compressor;

cooling the removed air;

feeding the cooled removed air through thermally loaded components of the combustor and/or the turbine inside an internal cooling channel;

cooling the air after it has passed the thermally loaded components;

compressing and adding the air to the compressor end air;

wherein, in the manner of a targeted leakage, a small portion of the removed air is fed for film cooling into the turbine stream through drilled cooling openings provided on the components; and

removing more heat from the air in the cooling steps than is transferred into the air while flowing through the thermally loaded components to an extent as to lower the temperature of the compressor end air below that without adding the removed air.

Claim 33. (Currently Amended) ~~An apparatus for~~ The method of claim 32, in order to cool thermally loaded components, the~~cooling a~~ gas turbine system comprises~~comprising~~: a compressor that takes in suction air on the inlet side and

compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, whereby, in order to cool thermally loaded components of the combustor and/or the turbine, first cooling lines from the compressor and/or the outlet of the compressor to components and second cooling lines from the components back to the compressor and/or the outlet of the compressor are provided, wherein a cooler is located in the second cooling lines and wherein the components to be cooled are provided with drilled film cooling openings that communicate with the first and second cooling lines, wherein means for cooling the cooling air are located in the first cooling lines.

Claim 34. (Canceled).

Claim 35. (Previously presented) A method for cooling a gas turbine system comprising a compressor that takes in suction air on the inlet side and compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, the method comprising:

removing compressed air from the compressor;

cooling the removed air;

feeding the cooled removed air through thermally loaded components of the combustor and/or the turbine inside an internal cooling channel;

cooling the air after it has passed the thermally loaded components;

compressing and adding the air to the compressor end air;

wherein, in the manner of a targeted leakage, a small portion of the removed air is fed for film cooling into the turbine stream through film cooling openings; and

removing more heat from the air in the cooling steps than is transferred into the air while flowing through the thermally loaded components to an extent as to lower the temperature of the compressor end air below that without adding the removed air.

Claim 36. (Currently Amended) ~~An apparatus for cooling~~ The method of claim 35, in order to cool thermally loaded components, the~~a~~ gas turbine system comprises~~comprising~~: a compressor that takes in suction air on the inlet side and compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, whereby, in order to cool thermally loaded components of the combustor and/or the turbine, first cooling lines from the compressor and/or the outlet of the compressor to components and second cooling lines from the components back to the compressor and/or the outlet of the compressor are provided, wherein a cooler is located in the second cooling lines and wherein the combustor and/or turbine are provided with film cooling openings that communicate

with the first and second cooling lines, wherein means for cooling the cooling air are located in the first cooling lines.

Claim 37. (New) The method as claimed in Claim 35, wherein the thermally loaded components include the walls of the combustor and/or walls of the transition pieces and/or housing parts of the turbine and/or rotor parts of the turbine and/or blades of the turbine.

Claim 38. (New) The method as claimed in Claim 37, wherein the blades of the turbine are cooled with the cooling air, and drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 39. (New) The method as claimed in Claim 35, wherein the compressor of the gas turbine system itself is used for compressing the cooling air after the cooling process.

Claim 40. (New) The method as claimed in Claim 35, wherein a cooler is used to cool the cooling air.

Claim 41. (New) The method of Claim 36, wherein the components include blades of the turbine, and drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 42. (New) The method of Claim 36, wherein the second cooling lines merge into the compressor at an intermediate pressure level.

Claim 43. (New) The method of claim 36, wherein the gas turbine system comprises a cooler located in the first cooling lines.

Claim 44. (New) The method of claim 35, in order to cool thermally loaded components, the gas turbine system comprises: a compressor that takes in suction air on the inlet side and compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, whereby, in order to cool thermally loaded components of the combustor and/or the turbine, first cooling lines from the compressor and/or the outlet of the compressor to components and second cooling lines from the components back to the compressor and/or the outlet of the compressor are provided, wherein a cooler is located in the second cooling lines and wherein the components to be cooled are provided with drilled film cooling openings that communicate with the first and second cooling lines, wherein means for cooling the cooling air are located in the first cooling lines.

Claim 45. (New) The method of Claim 44, wherein the components include blades of the turbine, and drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 46. (New) The method of Claim 44, wherein the second cooling lines merge into the compressor at an intermediate pressure level.

Claim 47. (New) The method of claim 44, wherein the gas turbine system comprises a cooler located in the first cooling lines.

Claim 48. (New) The method of claim 32, in order to cool thermally loaded components, the gas turbine system comprises: a compressor that takes in suction air on the inlet side and compresses it to compressor end air that is available on the outlet side, a combustor in which a fuel is burned by using the compressor end air while resulting in the formation of hot gas, as well as a turbine in which the hot gas is expanded while providing work output, whereby, in order to cool thermally loaded components of the combustor and/or the turbine, first cooling lines from the compressor and/or the outlet of the compressor to components and second cooling lines from the components back to the compressor and/or the outlet of the compressor are provided, wherein a cooler is located in the second cooling lines and wherein the combustor and/or turbine are provided with film cooling openings that communicate with the first and second cooling lines, wherein means for cooling the cooling air are located in the first cooling lines.

Claim 49. (New) The method of Claim 48, wherein the components include blades of the turbine, and drilled film cooling openings are located on the leading blade edges and/or the trailing blade edges.

Claim 50. (New) The method of Claim 48, wherein the second cooling lines merge into the compressor at an intermediate pressure level.

Claim 51. (New) The method of claim 48, wherein the gas turbine system comprises a cooler located in the first cooling lines.